LODI CITY COUNCIL

Carnegie Forum

305 West Pine Street, Lodi

"SHIRTSLEEVE" SESSION

Date: April 7, 2009

Time: 7:00 a.m.

For information regarding this Agenda please contact:

Randi Johl

City Clerk

Telephone: (209) 333-6702

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Informal Informational Meeting

A. Roll Call by City Clerk

B. Topic(s)

B-1 Lodi Energy Center Update (EUD)

C. Comments by Public on Non-Agenda Items

D. Adjournment

Pursuant to Section 54954.2(a) of the Government Code of the State of California, this agenda was posted at least 72 hours in advance of the scheduled meeting at a public place freely accessible to the public 24 hours a day.

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Randi Johl
City Clerk

AGENDA ITEM B-01

CITY OF LODI
COUNCIL COMMUNICATION

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AGENDA TITLE: **Lodi Energy Center Update (EUD)**

MEETING DATE: **April 7, 2009**

PREPARED BY: **Electric Utility Director**

RECOMMENDED ACTION: Receive information related to the present status, cost estimates and economics related to the Lodi Energy Center.

BACKGROUND INFORMATION: Lodi is one of 14 public entities pursuing the licensing and development of the Lodi Energy Center, a 255-megawatt combined cycle gas turbine facility owned by the Northern California Power Agency. The project is planned for construction on City property at the White Slough wastewater treatment plant. Lodi has subscribed to 11.8 percent, or 30 megawatts, of the power plant's energy output.

Project licensing and development activities commenced in March 2008. The Phase 2 Development Agreement provides a $25 million budget for initial design and development activities, with an additional $15 million approved by participants in late 2008 to acquire an option on Power Island facilities. Lodi's share of this $40 million budget is $4.7 million.

The current project schedule anticipates securing financing and commencing construction during early 2010 followed by project completion and commercial operation in April 2012.

The most significant current issue is the project's escalating cost. Project engineer WorleyParsons recently revised the cost of the Lodi Energy Center to approximately $433 million, far greater than the prior $319 million estimate. The increase is largely attributable to higher sales tax, increased financing and bond reserve costs (with little arbitrage opportunity); higher material costs and labor charges; enlarged project contingency amount; and increasing the plant's capacity to as much as 302MW.

Despite this roughly 30-percent increase, the overall cost has increased by less than $3 per megawatt-hour, or 0.3 cents per kilowatt/hour to the consumer, due to a 20-percent increase in baseload output and improved efficiency. Projections indicate that the project remains an economically feasible resource for participants based on its projected average power cost of less than $70 per megawatt.

The attached Lodi Energy Center White Paper provides a detailed overview of current project issues, and market conditions and project economics.

The California Energy Commission is overseeing required environmental assessments for the project. The current timeline calls for the Commission to issue a license for construction of the project in November 2009. At that time, Lodi Energy Center participants will either reaffirm their interest by consummating long-term project agreements or take other actions, including liquidating existing project assets, to meet future electrical needs.

George F. Morrow, Electric Utility Director

APPROVED: _____
Blair King, City Manager

White Paper
Lodi Energy Center (LEC)

Prepared by LEC/NCPA Staff
April 1, 2009

EXECUTIVE SUMMARY:

- **Issue:** Lodi Energy Center cost estimates have recently risen due to added financial conditions, project contingencies, sale tax, and manufactured materials cost escalation.

- **Assessment:** Although Project capital cost estimates have risen about 30%, the overall project cost has increased by less than $2/MWh, or less than 3%, mitigated by nearly a 20% increase in project baseload power output and improved fuel conversion efficiency. The Project remains an economically feasible resource to serve Participant end use loads.

- **Recommendation:** Continue current Phase 2 Project efforts including: contracting for power island equipment and completing detailed engineering and design; completing the CEC and all related licensing processes; preparing requisite financing, operations, and fuel supply agreements; and bidding out Project construction and materials on schedule at the end of 2009. At that time, Project Participants will then either reaffirm their interest in consummating Project development or take other actions, including liquidating then existing Project assets, to meet future load service needs.

BACKGROUND INFORMATION:

Lodi is one of fourteen public entities pursuing the licensing and development of the Lodi Energy Center, a 255 MW combined cycle gas turbine facility to be located adjacent to an existing Northern California Power Agency (NCPA) 50 MW gas turbine facility (STIG) located the White Slough Treatment Facility in Lodi California. Lodi has subscribed for an 11.765 percent, or a nominal 30 MW, Participation Share of this Project (see Chart 7).

Project licensing and development activities formally commenced in March 2008 after all Participants received necessary approvals from their governing bodies and executed Phase 2 Agreements with NCPA. The Phase 2 Agreement provides a $25 million budget for Project initial design and development activities including the procurement of needed ERCs (Emission Reduction Credits); late in 2008 and upon the recommendation of the Project Participant Committee, and the subsequent approval of NCPA and all Project Participants, Amendment 1 to the Phase 2 Agreement was executed providing up to an additional $15 million to prepare an RFP to secure cost certainty and delivery timing on essential Project power island equipment (the large key components of the generating station). Thus the total currently authorized LEC budget is $40 million ($25 million plus $15 million) and Lodi's proportionate share of this budget is $4.7 million.

The current Project schedule anticipates securing Project financing and commencing construction during early 2010 followed by Project completion and commercial operation in April 2012.

CURRENT ISSUES:

1) **<u>Power Island Equipment Bid</u>** - Project staff has been negotiating with GE and Siemens-Westinghouse (SW) to secure cost and delivery certainty on key LEC power generating equipment. In order to remain on schedule, the vendor will need to be selected within the next

two months. Upon selection, a substantial deposit (which funds have already been received from Project Participants) will be made to the selected vendor.

2) **LEC Project Cost Estimate** - WorleyParsons (WP), the engineering firm providing detailed Project design and engineering, recently completed a preliminary revised Project cost estimate suggesting a total Project cost of approximately $433 million; significantly higher than the most recent prior Project cost estimate of $319 million. The primary components of the increased cost estimate are: addition of sales tax; increased financing and bond reserve costs (with little arbitrage opportunity); higher material costs and labor charges; enlarged project contingency amount; and greater Project power supply capability.

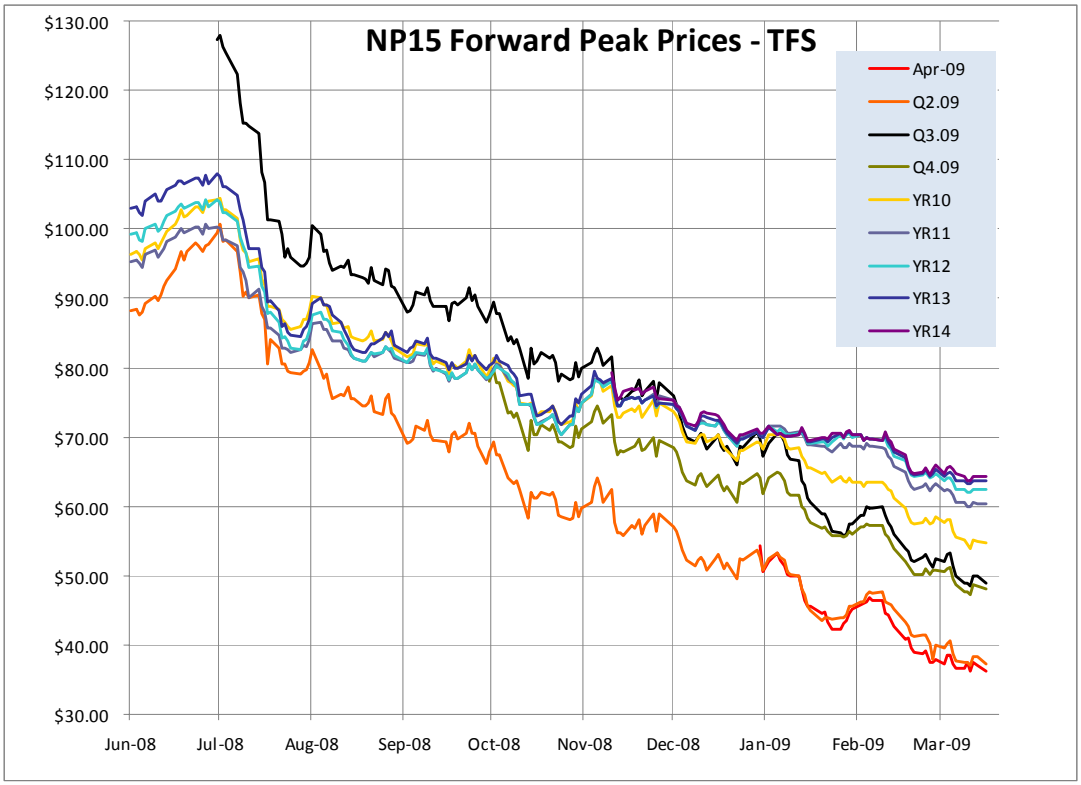
MARKET CONDITIONS:

Before re-evaluating Project economics, it is important to review the various market sectors which affect the need for, and viability of, any new large generation asset. Project Participants joined together to investigate, plan and license the Lodi Energy Center to attain the necessary scale economies to build a very fuel efficient and environmentally responsible natural gas fired combined cycle facility. During the last 12 months however, multiple market sectors have exhibited volatile swings and the U.S. national economy appears to be in its most precarious position in decades. Nonetheless, energy decision makers must make decisions as to how loads will be served and how to replace less efficient and retiring power plants.

1) **Energy Market Volatility** – Past, present and future anticipated energy prices should help to guide decision maker expectations regarding the "value" of a given new generation project, and whether to participate in such a project or to seek future energy supplies elsewhere or from "the market." Securing future power supply from a third party exposes the purchaser to significant "counter party risk;" that is, the risk that the party will default on its end of the transaction or perhaps go bankrupt, a situation which becomes more probably when market prices swing widely, away from the price at which a supplier has committed. Most of us can recall the ENRON debacle, the PG&E bankruptcy, and more recently, the virtual collapse of many once mighty financial institutions and banking houses.

   Chart 1 below shows the rise and decline of 5-year forward energy prices over the last twelve months. Note that forward prices peaked in the July 2008 timeframe at between $100 and $130 per MWh, followed by a relatively steep and steady decline. During the July–September 2009 period (the highest, solid black line) forward prices peaked at $130/MWh and are currently running at about $50/MWh, a price drop of over 60%. This trend very much tracks the rise and fall of oil prices over the same period and the ongoing decline in macro economic conditions. As market prices decline, utility decision makers often question whether a policy shift from self financed, constructed and operated power projects to "market supplied power" is warranted – despite the well known difficulties to attaining "project equivalent" market supply dependability, favorable contract terms and conditions, counter-party credit reliability, long-term durability, and the assurance of local control.

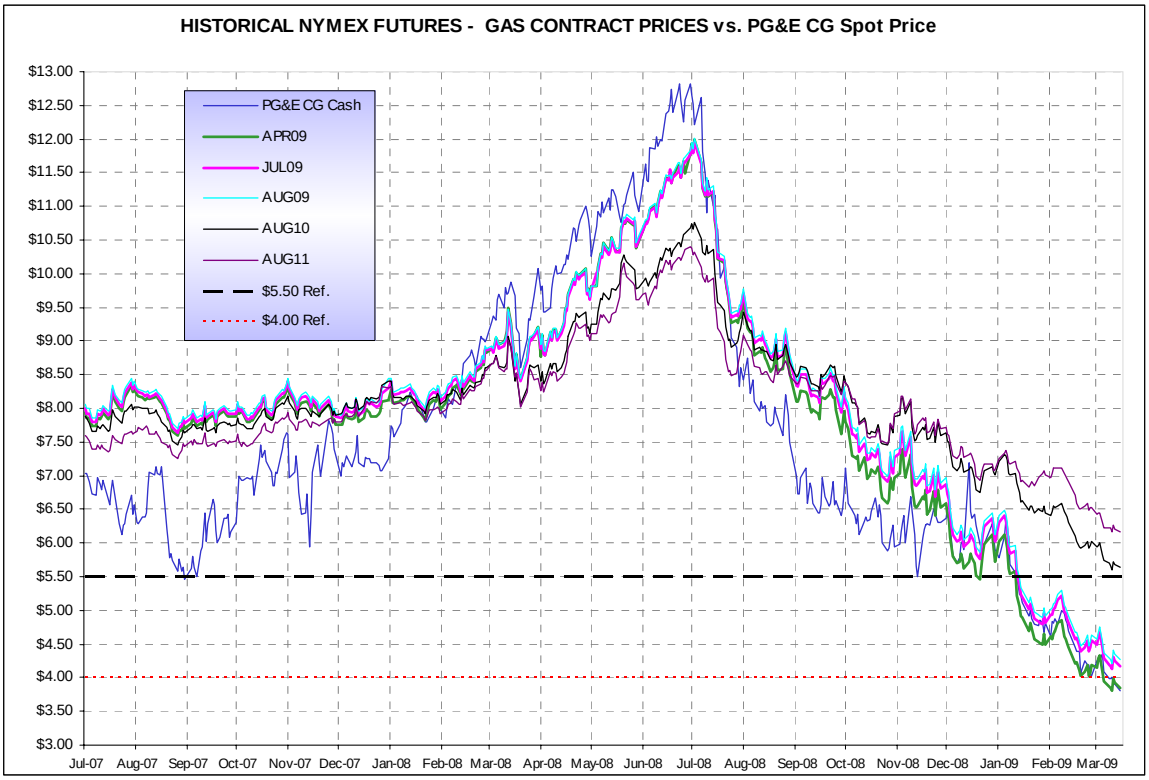
CHART 1



2) **Natural Gas Market Volatility** – Past, present and future anticipated natural gas fuel prices should also help guide decision maker expectations regarding the "value" of a given new natural gas fired generation project. In the case of the LEC, higher natural gas prices increase the value of project output versus both market alternatives and other less efficient gas fired plants. Current power island equipment vendor information specific to the LEC suggests a net heatrate (the rate at which fuel is converted to electrical energy) of about 6800 Btu/kWh; average implied heatrate for market power purchases are closer to 10000 Btu/kWh, although this can vary depending upon time of year and the composition of power plants providing such supplies. Note also that the "size" of the LEC is the minimum plant size necessary to attain efficiencies below 7000 Btu/kWh. New, smaller units, in the 50 to 175 MW capacity range, typical have heatrates between 8500 and 10500 Btus/kWh.

Chart 2 shows NYMEX gas futures prices together with PG&E City-Gate (CG) prices since July 2007. Focusing on the CG price, which offers a good proxy for daily gas purchases and associated fuel only production cost for the LEC, note that the CG price was at $7.00/MMBtu in July 2007, dropping to about $5.50/MMBtu in August 2007, and then starting nearly a year long climb to $13.00/MMBtu in July 2008, and then plummeting to less than $4.00/MMBtu currently. These are very wide swings over a less than two year period and significantly affect the actual and perceived value of the LEC. In a $13.00/MMBtu gas market, LEC's fuel only production cost is estimated to be about $88/MWh versus an energy market price (at a 10000 Btu/kWh heatrate) of $130 / MWh, resulting in a positive margin to LEC owners of $42/MWh. Given $4.00/MMBtu gas prices, however, LEC's fuel only production cost becomes about $27/MWh versus a market alternative price of $40/MWh, producing a positive margin to LEC owners of only $13/MWh, almost a $30/MWh reduced benefit from the high gas cost situation. The paradox is that while the LEC owners' retail customers obviously benefit from the lower gas price situation, the LEC Project "looks" much better economically under a high gas price scenario. In reality, the LEC Project provides one additional vehicle for Project owners to use to protect against high and volatile fuel prices, as well as to predictably serve retail loads.

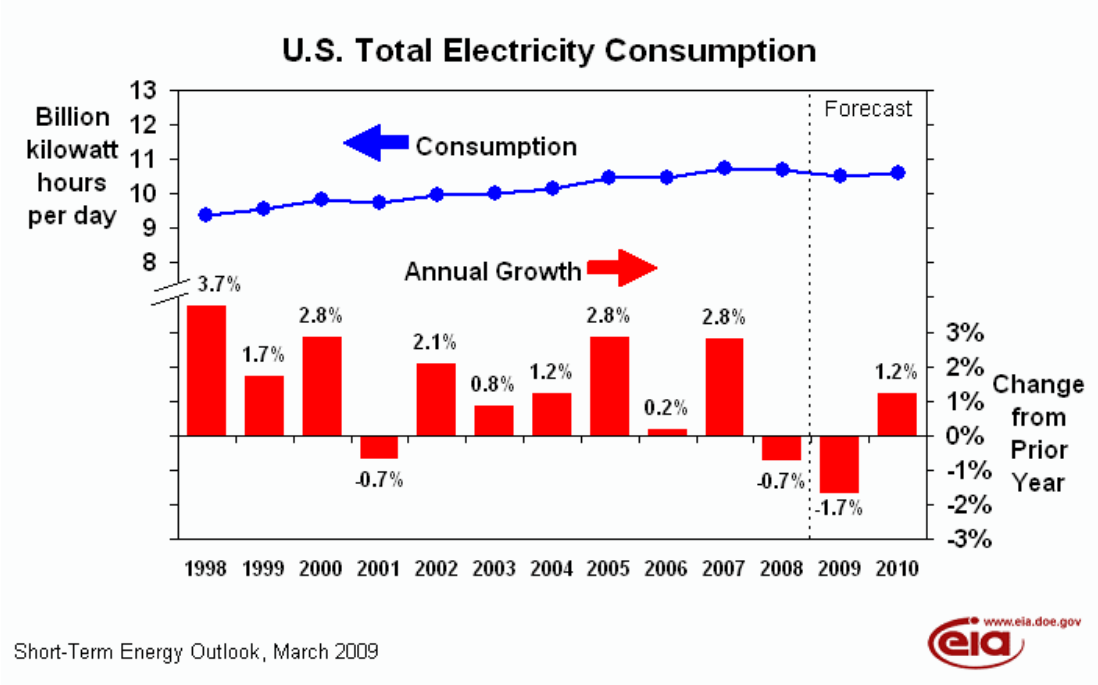
CHART 2



3) **Financial Markets** - The current "meltdown" of the financial marketplace adds further uncertainty and cost to the development, construction and financing of a large power project. To the extent there is a bright side to this situation, it is that currently long term tax free bond rates appear to be in the 5-6% range. On the negative side, short term investment earnings rates are close to 0% and thus the anticipated earnings on funds on hand during the construction process (along with carrying a one year debt service reserve add significantly to Project costs), costs that previously were largely offset by interest earnings on funds on hand.

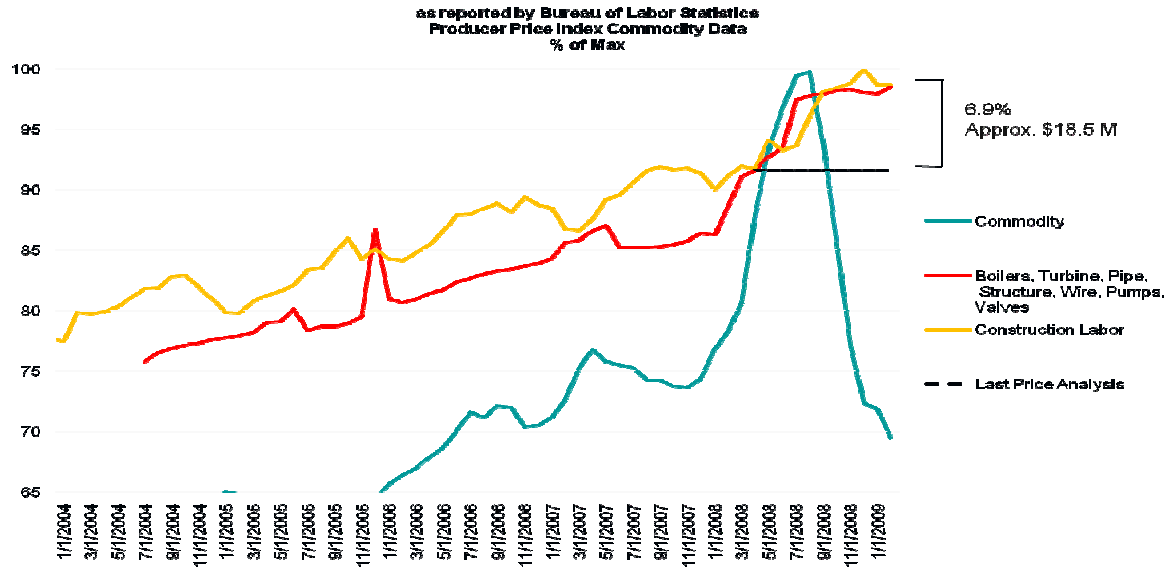
4) **General Economic Conditions** - The general condition of the U.S. economy is said to be worse than at any time since the Great Depression of the 1930s. This has translated into cash strapped federal, state and local government entities, including pubic power companies. For electric utilities, this situation often extrapolates to flat or declining loads for a period of time, placing further hesitation or uncertainty on the necessity for constructing new generation facilities. With regard to the LEC, these circumstances are at least partially mitigated by the significant plant efficiency along with the ongoing need to replace aging power plant infrastructure. In addition, the downturn in the economy should translate into a lower overall project construction cost than if such tasks were performed in more booming economic conditions. A further side benefit is that a construction project over the next several years will provide a beneficial injection to local/statewide employment and income. And although economic activity is forecasted to slow over the next several years, growing population and pent up demand will eventual increase economic growth and the demand for energy. (see the short-term EIA forecast below which shows electricity consumption demand growing again in 2010)

CHART 3



5) **Commodity and Labor Markets** - More particular to the LEC is the intuitive expectation that the poor macro economic conditions should translate to reduced labor and materials costs during the LEC procurement and construction phase. Unfortunately, this expectation is not yet manifesting itself as reduced labor and materials costs in the relatively specialized power equipment and labor sector. Observing Chart 4 on the next page shows that the general Producer Price Index (PPI) for all commodities (the blue line) shows the anticipated result in an economic downturn, a swift and steep decline of about 30 percent, and it perhaps may go lower yet. On the other hand, Turbines, finished goods and related equipment (red line) and construction labor (yellow line) are still increasing although the rate of increase appears to have diminished somewhat, and may start to track the decline in commodity prices over the next 6 to 18 months. These latter two indices directly impact the LEC construction cost estimates and help to explain the near term increase in estimated LEC construction cost in the face of a declining general economy.

CHART 4
(February 2009)



LODI ENERGY CENTER COST ESTIMATES:

Before comparing the two most recent cost LEC cost estimates, it should be noted that the actual cost of the Project will not be certain until the detailed Project design and engineering has been completed (underway now and being performed by WorleyParsons); the Project completes the bid and contract process for materials, construction, and staff support; and when the Project ultimately enters commercial operation. Up to this point in time, estimates have been based on the cost of similar facilities, applying materials and labor escalating factors and adjustments based on known or expected differences between the LEC and other projects. This section will review: 1) LEC cost estimates as of December 2008; 2) LEC cost estimates as of March 2009; 3) a summary of the primary cost differences; 4) attributes of the Project site in Lodi; and 5) a comparison of LEC estimated costs to other recent combined cycle facility costs or cost estimates.

1) **<u>LEC Estimate as of December 2008</u>** - During the participant decision process, project/NCPA staff have attempted to utilize the best available data to estimate the cost of the LEC and to compare this derived cost against other alternatives. For the December 2008 period, the following assumptions were used:
   - 255 MW plant capacity
   - 78% annual capacity factor
   - 30 year project life
   - $320 Million total capital cost (no interest earnings offset, and including “owners’ costs)
   - 5% financing rate
   - $6.00 / MWh fixed and variable O&M
   - $1.25 / MWh dispatch and scheduling cost allocation from NCPA
   - $7.00 / MMBtu natural gas cost
   - 7000 Btu / kWh project heatrate

   Resulting Projected Unit Cost:
   - Capital Cost $11.95/MWh; ($1,255 / kW)
   - Fuel Cost $49.00/MWh
   - F&VOM $ 7.25/MWh

   <u>Total Unit Cost (Yr 1)</u> **<u>$68.20/MWh</u>**

2) **LEC Estimate as of March 2009** - This estimate reflects the preliminary estimate by WorleyParsons, the LEC Project engineering firm which is still being refined. The following assumptions were used:
   - 280 MW plant capacity (with no credit for capacity between 280 and 302 MW)
   - 78% annual capacity factor
   - 30 year project life
   - $422 Million total capital cost (no interest earnings offset, and including owners' costs)
   - 5% financing rate
   - $6.00 / MWh fixed and variable O&M
   - $1.25 / MWh dispatch and scheduling cost allocation from NCPA
   - $7.00 / MMBtu natural gas cost
   - 6800 Btu / kWh project heatrate

   Resulting Projected Unit Cost:

• Capital Cost	$14.35/MWh; ($1,507 / kW)
• Fuel Cost	$47.60/MWh
• F&VOM	$ 7.25/MWh
Total Unit Cost (Yr 1)	**$69.10/MWh**

3) **Summary of Cost Differences** - On a unit cost basis, the more recent estimate is $0.90/MWh greater than the estimate used during December 2008, or a 1.3% increase in the projected cost of first year energy output from the Project. Estimated capital cost have increased $102 million primarily as a result of adding in sales tax, added materials and labor costs, increased project contingency amounts, increased project financing costs due to minimal arbitrage opportunity and the addition of a one-year debt service reserve. These added capital costs were partially offset by the improved project heatrate and the increased project baseload capacity which can either be subscribed proportionately by existing Project Participants or allocated to other public agencies or third parties to assure existing Project Participants attain the unit cost shown above.

4) **LEC Site Attributes** - The proposed LEC Project site is near ideal for power plant operations. Site benefits include: a) staff and facilities economies with the existing NCPA STIG combustion turbine plant; b) proximate high pressure PG&E natural gas supply line; c) existing switchyard and interconnection to the CAISO grid with 280 MW of incremental transfer capability available; d) availability of Project make-up water from the City of Lodi's White Slough Treatment Plant; e) utilization of underground injection wells to dispose of project blowdown (and thus avoid troublesome ZLD technology); and land availability, without proximate residential and commercial activity, via an existing lease with the City of Lodi. A potential minor negative associated with the site is the footprint size of available space which may require additional engineering, design and materials fabrication for various cable and piping runs.

5) **Other Comparable Facilities** - This section will compare several projects either recently completed or in the planning stages with the LEC facility. It should be noted, however, that no two projects are "identical" in that all will vary by time, location, equipment selected, size of the plant, and other factors particular to a given technology or sponsoring organization. The primary point of comparison is the expected cost per kW for the project.

   - **PJM "CONE" Plant** - The PJM Interconnection is a regional transmission organization (RTO) that coordinates the movement of wholesale electricity in all or parts of 13 states and the District of Columbia. PJM at least annually updates its Cost of New Entry ("CONE") Combustion Turbine Power Plant Revenue Requirements to reflect the cost of new capacity additions within the PJM interconnection. The most recent update was

calculated on August 26, 2008 based on a new 480 MW combined cycle facility consisting of two GE Frame 7s coupled with 2 HRSGs and one steam turbine generator. The estimated capital cost in January 2010 dollars is $1,230/kW. For capital cost escalation purposes, PJM's CONE calculation uses the average rate of increase over the last three years as shown in the Handy-Whitman Index, which is 10.4% year. Continuing this escalation trend for the CONE plant for two additional year's results in an estimated capital cost of $1,500 kW as of January 1, 2012, virtually identical with the current LEC cost estimate without attempting to normalize for the expected construction economies associated with building a plant significantly larger than LEC.

- **Tessenderlo, Belgium 420 MW CCGT** - On March 12, 2009, Siemens-Westinghouse reports that it has secured a turnkey order for a 420MW (1 gas turbine, 1 steam turbine and 1 generator) combined cycle plant in Belgium; the project targeted on line date is mid 2011. The total turnkey cost is reported to be EUR320 million, which converts to a turnkey cost of $438 million in U.S. dollars. Assuming owner's cost will add another 30% to this amount, the total cost would be about $570 million U.S., or about $1,360/kW. Again, this does not normalize for the 9 month later on-line date or the lower project capacity associated with LEC.

- **CPUC 2008 Market Price Referent (MPR)** - The California Public Utility Commission annually updates its reference gas fired alternative generation cost to establish a cost benchmark for IOUs to gauge potential green power purchases. The 2008 MPR is based on a 500 MW facility with a total capital cost of $1,242 (in 2008 dollars). Escalating this total capital cost at 5% per year for four years results in an estimate year 2012 total capital cost of $1,510/kW.

6) **LEC Evaluated versus Power Market** - NCPA staff has evaluated the LEC against the current power market over the anticipated LEC 30-year project life. As identified previously, the power "market" is not equivalent to project ownership and control, and there are virtually no counter parties currently available that will enter a contract for a duration greater than five years; and if there were, there would be significant credit, contract and performance issues. Moreover, as power industry decision makers have observed since "deregulation," price and performance volatility seem to be the new norm and self ownership of generation plant helps to mitigate some of these concerns, although fuel supply and price can and do vary with market conditions. The benefit of owning a very efficient power plant is its protection value against spiking "spot" market prices which in California are driven primarily by the least efficient gas plant on line to meet load and the inherent gyrations in an unregulated market. Note that the "new" price caps under the MRTU environment are effectively $2,500/MWh.

   NCPA staff takes two approaches to evaluating Project economics: 1) estimating the breakeven Project cost / kW as a function of forecasted market conditions; and 2) estimating the net present value benefit over Project life.

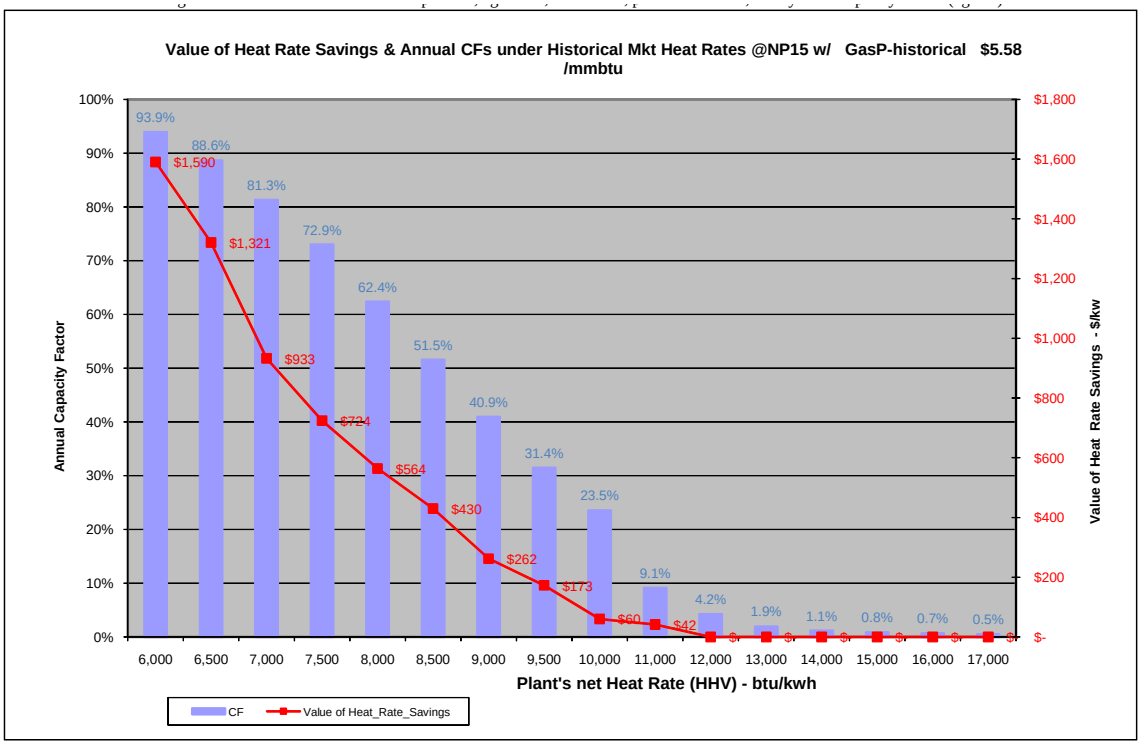
   Breakeven Project Cost - Apart from self and local ownership and control over a long term power generation station, and then owning the project outright after the project financing period, in the California energy environment there are three primary measures of the "value" of generation hardware: value of energy versus alternatives; value of ancillary services products that can be sold; and the value of capacity for meeting resource adequacy and local capacity requirements (along with the more traditional value of simply assuring the retail customer base that its utility company intends to meet its load obligations under all foreseeable circumstances).

   Chart 5, on the next page, show the estimated value of a generation resource as a function of project heatrate and resultant expected annual operating capacity factor. This particular analysis is run

using a conservative historic $5.58/MMBtu natural gas price; future higher average natural gas prices will commensurately increase the imputed value of project capacity. The "blue vertical bars" indicate the percentage of a year a project is expected to run given a project net heatrate. LEC's heatrate of 6800 Btu/kWh falls about half way between the 6500 and 7000 heatrate bars (the second and third from the left of the graph). Splitting the difference between these two bars suggest an annual capacity factor of about 84%. The "red line" on the chart shows the value of this more efficient heatrate versus the market, translated to $/kW at the time of construction. Applying this assessment technique to LEC indicates a breakeven capacity equivalent value of about $1,100 per kW (about half way between $1,321 and $933/kW for bars two and three, from the left). The LEC also has the capability to provide ancillary services into the CAISO markets, primarily Spinning Reserve, RegUp and RegDn. Focusing only on RegDn, the estimated value of providing 75 MW of RegDn, based on actual CAISO prices during the 7/1/04 through 2/28/09 period, converts to about a $200/kW equivalent at the time of project construction. The third component of value focuses on resource adequacy and local area capacity values that can either be sold on the market or retained by project owners in lieu of having to procure the same capability. Although the value of such capacity is somewhat malleable at this point in time, it is estimated to be between $425 and $700 per kW at the time of construction.

Thus, adding up these three value aspect converted to time of construction equivalent $/kW indicates a project value of between $1,725 and $2,000 per kW, which can be weighed against the currently estimated the currently estimated $1,518 LEC Project cost estimate.

CHART 5



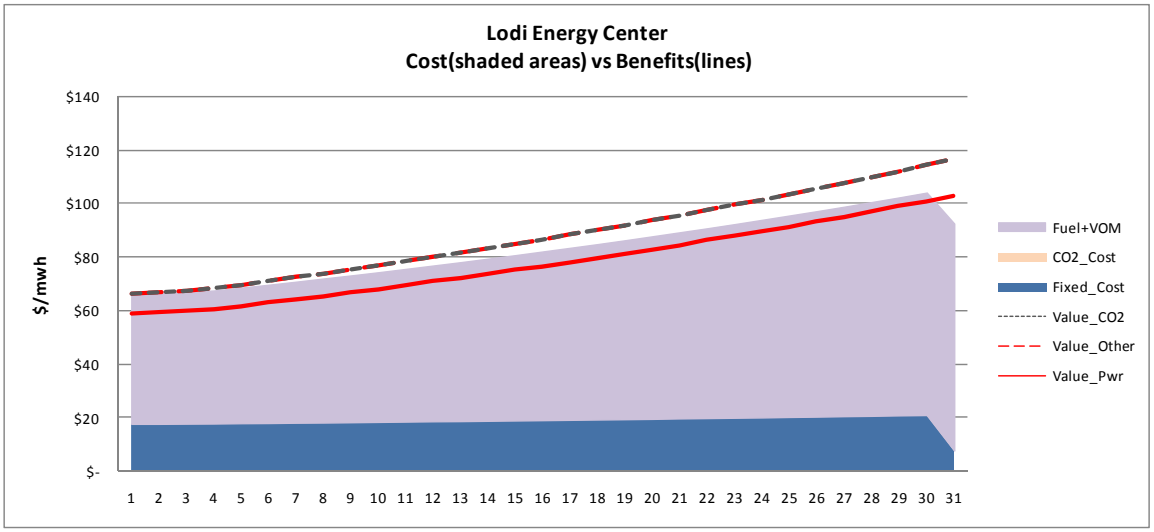
Project Lifecycle Cost - NCPA staff also estimated Project value using a year by year view over the 30 year Project financing life (actual project life will be a function of resource supply and demand conditions thirty years hence, however there are many thermal projects operating today well beyond 30 years of operation). It was mentioned earlier that apart from self/local ownership and control over

a long term power generation station, and then owning the project outright after the project financing period, in the California energy environment there are three primary measures of the "value" of generation hardware: value of energy versus alternatives; value of ancillary services products that can be sold; and the value of capacity. An additional element of value in a carbon sensitive environment is the reduced carbon emissions associated with a more efficient natural gas project.

Chart 6 shows annual estimated fixed cost (the dark blue shaded area) along with fuel plus fixed and variable O&M cost (the grey shaded area) over 30 year project life, starting at about $65/MWh in year 1, growing to about $100/MWh in year 30. The solid red line represents the value of energy only against market alternatives; the multi colored dashed and dotted line shows estimated project value including ancillary services revenues and capacity value (assumed to be about $30 per kW year). Although there is a "CO2 Cost" category and the net CO2 value has a positive impact on Project economics, CO2 value has conservatively not been included in this chart.

The net result is a NPV lifecycle benefit/cost ratio slightly greater than 1, resulting in a total net present value benefit of over $145 million.

CHART 6



LODI ENERGY CENTER PARTICIPATION AND PHASE 2 BUDGET SHARES

For reference purposes, Chart 7 displays the LEC Project participation percentages and total funding obligations for Phase 2 Project activities.

CHART 7

7/16/2008

Lodi Energy Center Participation Percentages, Capacity and Budget Allocation (Including the Propsed Amendment No. 1 Budget Increase)						
Project Member	Project Member Participation Percentage (%)	Project Member Capacity Share (MW)	Initially Approved Phase 2A Budget	Initially Approved Phase 2B Budget	Amend. No. 1 Phase 2B Budget Increase	Total Phase 2 Budget w/ Amendment No. 1
			$ 16,000,000	$ 9,000,000	$ 15,000,000	$ 40,000,000
Azusa	2.745%	7.0	$ 439,216	$ 247,059	$ 411,765	$ 1,098,039
BART	5.882%	15.0	941,176	529,412	882,353	2,352,941
Biggs	0.392%	1.0	62,745	35,294	58,824	156,863
CDWR	23.529%	60.0	3,764,706	2,117,647	3,529,412	9,411,765
Gridley	1.961%	5.0	313,725	176,471	294,118	784,314
Healdsburg	1.569%	4.0	250,980	141,176	235,294	627,451
Lodi	11.765%	30.0	1,882,353	1,058,824	1,764,706	4,705,882
Lompoc	1.961%	5.0	313,725	176,471	294,118	784,314
Modesto	23.529%	60.0	3,764,706	2,117,647	3,529,412	9,411,765
Plumas-Sierra	0.784%	2.0	125,490	70,588	117,647	313,725
Port of Oakland	1.176%	3.0	188,235	105,882	176,471	470,588
PWRPA	1.961%	5.0	313,725	176,471	294,118	784,314
Silicon Valley Power	19.608%	50.0	3,137,255	1,764,706	2,941,176	7,843,137
Ukiah	3.137%	8.0	501,961	282,353	470,588	1,254,902
Total	100.000%	255.0	$ 16,000,000	$ 9,000,000	$ 15,000,000	$ 40,000,000

SUMMARY, CONCLUSIONS AND NEXT STEPS

LEC Project Participants are currently on time and budget within the Phase 2 Project development process. All requisite permits and applications have been either received or are in process, the CEC AFC approval is anticipated by November 2009, negotiations are nearly complete related to securing Project power island equipment delivery timing and cost certainty, and needed Project design, engineering and contract preparation is underway and anticipated to be ready well in advance of the Project March 2010 financing date.

Recently issued Project cost estimates reflecting the addition of sales tax, financing costs, and labor and materials escalation suggest an increase in Project capital cost in the range of $100 million. This potential added cost, coupled with general economic uncertainties, has resulted in Project Participants' desire to review expected project benefits based on these changing conditions.

NCPA economic assessments indicate that the Project remains economically viable under likely future circumstances. In addition, the cost components of a combined cycle project tend (about 25% capital cost, 75% fuel plus variable O&M) to temper the overall impact of capital cost increases when expressed in $/MWh value.

Recommendation

LEC/NCPA Staff recommends that Project Participants maintain the momentum and existing schedule for LEC Phase 2 activities by completing Project detailed design and engineering, selecting a power island equipment vendor, and preparing all necessary documentation and paperwork to issue the LEC Project construction RFP at the end of 2009, and to finance the Project in early 2010, given Project Participant affirmation. The RFP will ultimately provide the single most reliable indication of Project cost and, if such cost is deemed to be unacceptable to Project Participants at that time, Participants will then have the opportunity to package up the accumulated assets (AFC approval, permits, air credits, interconnection approval, power island equipment, engineering design, and the like) and market this package to interested buyers. Halting or hesitating current LEC activities will not likely yield quicker or better decision making cost information and may significantly reduce or hamper the overall success of the Project.